



May 15, 2002

California Energy Commission
505 Ninth Street
Sacramento, CA 95814

Re: Draft Committee Report-Distributed Generation Strategic Plan

RealEnergy commends the CEC for taking the time and energy to thoughtfully outline the many issues distributed generation (DG) is facing in California.

DG Technology and Market Overview

The section on "DG Enterprises" is narrowly focused on the manufacturing of DG technologies. RealEnergy believes that the CEC has overlooked the vital importance of various business models that install, implement, own, and operate the DG technologies in the California market. These types of firms provide an iterative feedback loop that provides manufacturers with insights that improve products for market deployment. More importantly, these types of firms have become dispersed repositories of knowledge on the entire DG permitting process within the California marketplace (Air, Building & Safety, Interconnection, etc). By ignoring the role these firms play in developing the DG market, the CEC neglects the invaluable role they play in driving down product costs through equipment purchases, demanding better technology, refining statewide regulations, and in spurring private investments that improve grid reliability, security, and overall air quality. For a more in-depth discussion RealEnergy would refer the CEC to the report crafted by Arthur D. Little for the CEC's Feb. 5, 2002 meeting on the future of DG in California entitled, "DER Business Model Analysis" (attached).

One of the statements made by the CEC in the "Status of DG in California" needs to be clarified with market knowledge. The CEC states that, "[s]ince the approval of new interconnection rules in California, several hundred megawatts of new projects have been proposed. From January 2001 through March 2002, another 129 distributed generation projects was proposed throughout the state, representing more than 400 megawatts of new generation."¹ The key word in the statement is "proposed." While there are hundreds of megawatts of "proposed" DG awaiting interconnection with the utilities, the actual number of megawatts that have interconnected have been significantly fewer. While there are many contributing factors behind this, persistent gray areas surrounding much of the interconnection process -- save for the simplest installations and the continued uncertainty around CPUC policies that guide the utilities rates and tariffs for DG -- often combine to keep many DG projects from coming online.

¹Based on filings submitted by PG&E, SDG&E, SCE in their standby rated design applications before the CPUC, as cited in CEC's DG Strategic Plan-Draft Committee Report May 2002



Vision, Mission, and Principals

RealEnergy would caution the CEC against taking too conservative a position in addressing the role of DG in the market. By focusing on technical and market considerations before formulating a long-term vision and goal, the CEC faces two risks:

- Being marginalized by the pace of technology improvements and installations
- Providing an excuse for the CPUC and the utilities to dawdle on implementing Legislative initiatives such as the suspension of standby fees (SB 28x) and the cost aspects of the net metering law (AB 29X).

In short, this market will not happen simply because the retail costs of DG technology drop. Without a regulatory environment that actually encourages the deployment of DG through fair operational costs, any road map to developing an effective DG market will be unclear at best.

Along with investigating technical and market considerations, if the CEC would take the simple position of supporting the principles embodied in PUC sections 353.1 through 353.15, the CEC would honor its mission statement to "advocate and act through public/private partnerships to improve energy systems that promote a strong economy and a healthy environment."

Deployment Issues and Opportunities

RealEnergy applauds the Energy Commission's use of NREL's ten-point "Action for Reducing Barriers to DG," especially with regard to "Business Practice Barriers," and hopes the CEC adopts it as the framework for the Commission's strategy in moving forward.

With regard to environmental issues, RealEnergy will continue to deploy technologies that meet the most stringent environmental standards in the state. To that end, RealEnergy disagrees with the statement made regarding CARB and air emissions. Currently, there are internal combustion and reciprocating engines that meet CARB's emission criteria for both 2003 and 2007. More importantly, CARB made allowances for DG using CHP on their emission guidelines. We would encourage the CEC to look at emissions based on total system output (total Btu's produced per Btu consumed) for CHP systems and to make special technical considerations for DG technologies that utilize low Btu "waste-gas."

Potential Roles of Government in Addressing Issues and Opportunities

RealEnergy would disagree with the context of this outline regarding state, federal, and local government entities. We have found that the California Building Code is usually augmented by local officials enforcing national building codes, local ordinances, and rigorously applying the National Electrical Code when inspecting systems for final "sign-off."

In relation to the role of state agencies comment categories:

- Under "Incent", RealEnergy would strongly recommend that the CEC look to incent small-scale (10MW or less), clean, onsite DG as a means to achieve the State's desire for a 15% reserve capacity.
- Under "Regulate", RealEnergy would strongly recommend that the CEC look to the creation of both a statewide DG tariff and gas rate.

Under the 'Role of Federal Agencies' section, RealEnergy requests that the CEC clarify its position on the DOE's implementation of its "DER Strategic Plan." Will the CEC commit resources in a similar fashion so as to complement the work being done on a national level? Does the CEC share the DOE's vision?

Strategy Options and Goals for the Energy Commission

Under "General Strategies" we feel the CEC is missing two strategic opportunities. First, the CEC should use its working knowledge to identify market barriers to both entry and development for DG. Second, in a somewhat related vein, RealEnergy strongly recommends that the CEC utilize its vast expertise and knowledge to analyze and assess utility rates and tariffs. We feel there is market failure in this area. Information regarding the scope and impact of rates and tariffs (both current and proposed) is asymmetrical, raising risk and uncertainty for non-utility market participants. The CEC is uniquely qualified to address these two issues and should include them under its recommended "General Strategies."

Under "Leadership Opportunities," again, the CEC is too modest in the potential role they could play in facilitating the growth of the DG market. The CEC has the institutional resources to assess and analyze the scope and impact of utility rates and tariffs on the development of the DG market. By becoming the "arbiter of market information" the CEC, with its technical and regulatory expertise, could become a very powerful force for legislators, administrators, utility personnel and entrepreneurs to interact using the same frame of reference . . . thus leveling a portion of the energy market's "playing field."

In the "Collaboration Opportunities" section, the CEC not only has the opportunity to support other state entities, as it has stated in the draft, but to become an active "leader" in facilitating DG in California. As stated in the draft "[t]he CPUC and the Energy Commission continue to work together most effectively to develop interconnection standards." Perhaps now is the opportunity for the CEC to collaborate with the CPUC in supporting DG implementation.

While it has moved slowly, the CEC has played a strong role in moving along the Rule 21 process. While RealEnergy would like to see stronger leadership with regards to tangential issues related to Rule 21, we do acknowledge the collaborative effort as a success that the CEC should be proud of. Again, models for future collaboration - especially when they have the force of law backing them up - should endeavor to move a bit faster.

Net Term Goals 3-5 years

Under "Near Term Goals (3 - 5 Years)," RealEnergy would, again, strongly urge the CEC to at least include an attempt to assess and analyze the scope and impact of utility rates and



tariffs (current and proposed). The CPUC and its Energy Division should have their work cross-referenced, especially as rates, tariffs and interconnection policies together form the biggest barrier to the meaningful installation and operation of DG in California. For example, RealEnergy has yet to see a comparative economic analysis from the CPUC on the rates, tariffs and interconnection policies from states other than California or even across California utilities. In essence, citizens and businesses have no idea what DG costs to install and operate without undertaking a complex and time-consuming analysis. There is a clear market failure with regard to available information, leaving people and organizations at a loss to make an informed decision in the market.

Again, unclear interconnection policies, utility tariffs, demand and standby charges, and exit fees for DG are great barriers to effective DG deployment in California. The addition of new charges, along with the complex set of existing rates, either work to discourage the marketplace from exploring DG as a demand side option or make it uneconomical for projects to come online. It is not enough for the CEC to acknowledge the CPUC's work in this area. The CEC should actively support the creation of a fair marketplace for DG.

Conclusion

RealEnergy applauds the CEC's desire to create a DG State Agency Coordination Group and would seek to recommend that the CEC extends this principle to working more closely with the various DG committees under IEEE. Furthermore, RealEnergy supports the concept that the CEC creates a DG Strategic Plan, especially if it puts the CEC in the role of generating market information on the true cost of installing and operating DG. This activity would complement the CEC's goals of providing consumer education campaigns, including city, county planning, building departments, and air district staff and utility staff.

Thank you for your time. The CEC's continued research and development in supporting the deployment of DG technologies in relation to air emissions, benefits to the electric grid, and energy networks are crucial to further cementing DG's value in the California energy market.

Sincerely,

Jean Pierre Batmale
Manager of Government Affairs
RealEnergy, Inc.